

Contents

Letters to the Editor

- Position of comet P/Halley at the Giotti encounter
Curdt, W., Wilhelm, K., Craubner, A., Krahn, E., Keller, H.U. L1
- Rydberg transitions of neutral magnesium in the infrared: frequency measurements and Zeeman effect
Lemoine, B., Demuyne, C., Destombes, J.L. L4
- A search for infrared pulsations from PSR 1951 + 32
Clifton, T.R., Backer, D.C., Neugebauer, G., Kulkarni, S.R., Graham, J.R., Matthews, K. L7
- Far-infrared and radio continuum emission of nearby galaxies
Beck, R., Golla, G. L9
- Applications of image sharpening techniques. I. Nebular structure in H-alpha of AG Pegasi
Fuensalida, J.J., Rosa, F., Fuentes, F.J. L13
- The redshifts of the BL Lac objects 1749 + 096 and 2254 + 074
Stickel, M., Fried, J.W., Kühr, H. L16
- The giant arc in A 370: spectroscopic evidence for gravitational lensing from a source at $z=0.724$
Soucil, G., Mellier, Y., Fort, B., Mathez, G., Cailloux, M. L19
- A tentative approach to the second neutrino burst of SN 1987A
Haubold, H.J., Kaempfer, B., Senatorov, A.V., Voskresenski, D.N. L22

Cosmology

- Crowding on the sight line to the QSO PHL 1226: the nearby galaxy IC 1746 and a galaxy cluster at $z=0.16$
Bergeron, J., Boulade, O., Kunth, D., Tytler, D., Bokserberg, A., Vigroux, L. 1

Extragalactic astronomy

- Analysis of turbulence in the Large Magellanic Cloud. The H I radial velocity field
Spicker, J., Feitzinger, J.V. 10
- NGC 6047: radio source interaction with the environment
Feretti, L., Giovannini, G. 21
- Activity in the central parts of interacting galaxies: The starburst galaxy NGC 454
Johansson, L. 29

- Imaging procedures for gravitational lenses
Kayser, R., Schramm, T. 39
- A 21 cm study of some QSO/galaxy pairs
Boissé, P., Dickey, J.M., Kazès, I., Bergeron, J. 193
- Distribution and motions of atomic hydrogen in lenticular galaxies. V. NGC 4203: a gas-rich S0 with an inner and an outer H I ring
van Driel, W., van Woerden, H., Gallagher, J.S., III, Schwarz, U.J. 201

Stellar clusters and associations

- Studies of dynamical properties of globular clusters. IV. Detailed structure of 47 Tucanae
Meylan, G. 215

Formation, structure and evolution of stars

- Dust emission at submillimeter wavelengths from cloud cores and protostellar condensations in NGC 2024 and S 255 IR
Mezger, P.G., Chini, R., Kreysa, E., Wink, J.E., Salter, C.J. 44
- Evolution of low-mass close binary systems with a compact mass accreting component
Polyser, E., Savonije, G.J. 57
- Cepheids in the Magellanic Clouds. III. Fourier decomposition and frequency analysis of SMC Cepheid light curves
Andreasen, G.K. 71
- Magnetic structure in cool stars. XV. The evolution of rotation rates and chromospheric activity of giants
Rutten, R.G.M., Polyser, E. 227
- Photoelectric and visual photometry of P Cygni
Percy, J.R., Napke, A.E., Richer, M.G., Harmanec, P., Horn, J., Koubský, P., Kríž, S., Božic, H., Clark, W.E., Landis, H.J., Milton, R., Reisenweber, R.C., Zsoldos, E., Fisher, D.A. 248

Stellar atmospheres

- Rotational modulation and flares on RS CVn and BY Dra systems. VIII. Simultaneous EXOSAT and H α observations of a flare on the dMe star Gl 644 AB (Wolf 630) on 24/25 August 1985
Doyle, J.G., Butler, C.J., Callanan, P.J., Tagliaferri, G., de la Reza, R., White, N.E., Torres, C.A., Quast, G. 79

The Sobolev approximation for the line force and line source function in a spherically-symmetrical stellar wind with continuum opacity <i>Puls, J., Hummer, D.G.</i>	87	A simple dynamo model and the anisotropic α -effect <i>Durney, B.R.</i>	374
EXOSAT observations of M dwarf stars in the solar neighbourhood <i>Schmitt, J.H.M.M., Rosso, C.</i>	99	The solar system	
Stellar coronae with EXOSAT: broad band spectroscopy of nearby coronal sources <i>Pallavicini, R., Monsignori-Fossi, B.C., Landini, M., Schmitt, J.H.M.M.</i>	109	Properties of interplanetary dust from infrared and optical observations. I. Temperature, global volume intensity, albedo and their heliocentric gradients <i>Dumont, R., Levasseur-Regourd, A.-C.</i>	154
Oxygen in 20 halo giants <i>Barbuy, B.</i>	121	The mass of Ceres <i>Landgraf, W.</i>	161
High S/N detailed spectral analysis of four G and K dwarfs within 10 pc of the Sun <i>Perrin, M.-N., Cayrel de Strobel, G., Dennefeld, M.</i>	237	Celestial mechanics and astrometry	
Ca II absolute line profiles of southern late-type stars <i>Pasquini, L., Pallavicini, R., Pakull, M.</i>	253	The theory of the motion of Iapetus <i>Harper, D., Taylor, D.B., Sinclair, A.T., Shen Kaixian</i>	381
High resolution study of different groups of stars in the peculiar globular cluster ω Centauri <i>Francois, P., Spite, M., Spite, F.</i>	267	Satellite-type planetary orbits in double stars: a numerical approach <i>Rabl, G., Dvorak, R.</i>	385
Diffuse matter in space (including H II regions and planetary nebulae)		Physical and chemical processes	
Abundance variations in the planetary nebula A 78 <i>Manchado, A., Pottasch, S.R., Mampaso, A.</i>	128	The interaction between two jets in the firehose limit <i>Achterberg, A.</i>	167
The collisional excitation of helium in nebulae <i>Péquignot, D., Baluteau, J.-P., Gruenwald, R.B.</i>	278	Energy loss and mean free path of electrons in a hot thermal plasma <i>Haug, E.</i>	181
H ₂ O maser observations of late-type stars <i>Engels, D., Schmid-Burgk, J., Walmsley, C.M.</i>	283	Instruments, data processing, and computational methods	
NGC 7139 and its stellar neighbourhood <i>Weinberger, R., Ziener, R.</i>	297	Improved methods for turbulence in astrophysics <i>Spicker, J., Feitzinger, J.V.</i>	186
A study of the radio spectral index in the Galactic centre region: evidence for an unusual nonthermal emission component <i>Reich, W., Sofue, Y., Wielebinski, R., Seiradakis, J.H.</i>	303	A correction method for the sensitivity loss of the LWR camera on board the IUE satellite <i>Clavel, J., Gilmozzi, R., Prieto, A.</i>	392
The Cygnus X region. XVII. H 110 α and H ₂ CO line surveys with the 100 m-RT <i>Piepenbrink, A., Wendker, H.J.</i>	313	Abstracts of articles which have been published in A. & A. Suppl. Ser. 72, No. 1	
Star formation in the outer Galaxy <i>Wouterloot, J.G.A., Brand, J., Henkel, C.</i>	323	First supplement to the catalogue of observed periods of Ap stars <i>Catalano, F.A., Renson, P.</i>	399
High speed ionised knots in the Wolf-Rayet nebula RCW 104 <i>Goudis, C.D., Meaburn, J., Whitehead, M.J.</i>	341	The H I properties of spiral galaxies in the Virgo Cluster. I. Westerbork observations of 15 Virgo Cluster galaxies <i>Warmels, R.H.</i>	399
Model calculations for photospheres and envelopes: applications to "classical" Be stars <i>Höflich, P.</i>	348	The H I properties of spiral galaxies in the Virgo Cluster. II. One-dimensional Westerbork observations of 21 galaxies <i>Warmels, R.H.</i>	399
The Sun		Structure and dynamics of plasma tail condensations of Comet P/Halley 1986 <i>Celnik, W.E., Koczet, P., Schlosser, W., Schulz, R., Svejda, P., Weißbauer, K.</i>	400
Evolution of solar magnetic fields: modal structure <i>Stenflo, J.O., Güdel, M.</i>	137	A survey of Be stars in the $\lambda\lambda$ 7500–8800 region <i>Andrillat, Y., Jaschek, M., Jaschek, C.</i>	400
(RN) Spectrophotometric analysis of small sunspots <i>Stellmacher, G., Wiehr, E.</i>	149	The luminosity-diameter relationship of disk galaxies in clusters <i>Giuricin, G., Mardirossian, F., Mezzetti, M.</i>	400
Long-period signals in the 8 mm solar radio emission <i>Kurths, J., Aurass, H., Urpo, S., Pohjolainen, S.</i>	359	Optical behaviour of 8 BL Lac objects and the properties of their central nucleus <i>Xie Guang Zhong, Lu Ru Wei, Zhou Yuan, Hao Peng Jin, Zhang Yun, Li Xiao Yu, Liu Xin De, Wu Jian Xin</i>	400
Spatial and spectral structure of a solar flaring loop at centimeter wavelengths <i>Preka-Papadema, P., Alissandrakis, C.E.</i>	365		

